

DOCUMENT RESUME

ED 193 585

CG 014 746

AUTHOR Ingersoll, Berit; Depner, Charlene
 TITLE Support Networks of Middle-Aged and Older Adults.
 INSTITUTION Michigan Univ., Ann Arbor. Inst. for Social Research.
 SPONS AGENCY National Inst. on Aging (DHEW/PHS), Bethesda, Md.
 PUB DATE Sep 80
 GRANT AGO1632-02
 NOTE 29p.: Paper presented at the Annual Convention of the American Psychological Association (88th, Montreal, Quebec, Canada, September 1-5, 1980).
 EDRS PRICE MF01/PC02 Plus Postage.
 DESCRIPTORS *Age Differences; Comparative Analysis; Interaction; Interpersonal Relationship; *Middle Aged Adults; *Networks; *Older Adults; *Physical Health; *Sex Differences
 IDENTIFIERS *Support Systems

ABSTRACT

Research on social supports of the aged indicates that creation and maintenance of supportive interpersonal bonds among the elderly result in an enhancement of their quality of life. The nature of social support networks at different points in the life course was investigated to determine the relative size of social networks and the way men and women feel about them. Subjects were 718 individuals aged 50 and over (299 men and 419 women), chosen by probability sampling techniques to represent their age cohort in the coterminous United States. Interview findings indicated that women had slightly larger networks than men at the three age levels, i.e., middle-age (50-64), young-old (65-74), and old-old (75+). Men's and women's feelings about their networks were significantly different only in relation to how much their health interfered with network interactions. Significant age differences were found regarding the desirability of a larger network and the extent to which health interfered with network interactions. (Author)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED193585

Support Networks of Middle-Aged
and Older Adults*

Berit Ingersoll

and

Charlene Depner

Institute for Social Research
The University of Michigan

*This research is supported by Research Grant No. AGO 1632-02 from the National Institute on Aging. The paper was presented at the Meeting of the American Psychological Association, September, 1980, Montreal, Canada.

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Berit Ingersoll

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

CG 014746

Literature Review

Aging is frequently viewed as a series of losses. Children grow up and move away; retirement results in the loss of a work role; one's spouse may die; and one's physical health generally declines. Social scientists have discovered that a supportive network often serves as a buffer against these losses or "insults" of aging. They define support networks as "those groups or individuals who provide maintenance and sustenance - physical, emotional, spiritual, psychic or intellectual" (Robertson, 1978, p. 378).

The importance of a supportive network is exemplified by Lowenthal and Haven's (1968) finding that, among an elderly sample, the presence of a confidant helped mitigate the effects of widowhood and retirement. Similarly, Stephens, Blau, Oser and Millar (1978) found that older people with little social support were depressed, alienated from others, and inactive. They suggested that "the picture of a withdrawn and alienated older - not unlike our stereotypical view of the aged - is due more to the declining availability of informal social supports than to the aging process itself" (p.40).

Clearly then, information leading to the creation and maintenance of supportive interpersonal bonds among the elderly will result in an enhancement of their quality of life. It is especially important to learn what parts of the population are experiencing deficiencies in social support. As yet, however, most of the research on social supports of the aged has been based upon regional and specialized samples ranging from retirement communities (Longino and Lipman, Note 1) to senior clubs, centers, and nutrition sites (Kernodle and Kernodle, Note 2). Studies on social support among the aged have resulted in much seemingly contradictory information even on factors as basic as age and sex.

For example, some researchers associate aging with a gradual diminution in the number of supportive relationships available (Leveton, Griffen and Douglas, Note 3) and a decline in extensive informal social support (Stephens et al., 1978). Paradoxically, others have found that with age, people report more satisfaction with some aspects of their social networks. For instance, Seelbach and Hansen (1980) discovered that among their sample, the old-old (those who were over 80) reported more satisfaction with their family than did the young-old (those who were 60-80).

Findings on sex differences in social support among the elderly are even more confusing. Some researchers report no sex difference in the number of supportive relationships of older people (Longino and Lipman, Note 1; Stephens et al., 1978). On the other hand, Powers and Bultena (1976) found that aging men in their sample had a significantly larger number of people in their interactional network and a higher frequency of contact with these people than did their female counterparts. Similarly, Paganí (1972) stated that a smaller proportion of older men than older women reported feelings of loneliness.

Other research, however, has shown that women are more likely to have extensive and intimate social supports than are men. Lowenthal and Haven (1968) noted that sex differences are particularly prominent among those 60-65 where nearly 3/4 of the women have confidants as opposed to only 1/2 of the men. While men are more likely to name their wife as confidant, women establish a variety of supportive relationships outside of marriage (Lowenthal and Haven, 1968; Powers and Bultena, 1976). In addition to the variability among their friendships, older women also seem to have a unique capacity for

intensity in relationships. Myerhoff (1970), in her ethnography of a senior center, devoted an entire chapter to aged women's resourcefulness and their intense attachment to their social networks.

These differences in research results show that we have not yet obtained a clear picture of the social support characteristics of aging men and women. As the first report from a study based upon a national probability sample of older Americans, this paper seeks to further explore the issue of social supports among the aging and aged. The purpose of this paper is twofold:

- (1) To determine the relative size of the social networks of aging men and women.
- (2) To identify the differential feelings of aging men vs. women vis-a-vis their social networks.

On the basis of our review of the literature, we have developed the following hypotheses:

Size of network

- (1) With age, the network will decrease in size.
- (2) Men's networks will be smaller than women's networks.

Feelings about network

- (1) The importance of networks will increase with age as will the desire for a larger network.
- (2) Women will find their networks more important than will men and will desire larger networks.
- (3) The extent to which health restricts contact with the network will increase with age.

- (4) The extent to which health restricts contact with the network will have a greater impact on men (who have a low life expectancy) than women.

Methodology

The focus of this paper is on 718 individuals¹ aged 50 and over (299 men and 419) women who were chosen by probability sampling techniques to represent their age cohort in the coterminus United States. These individuals, who ranged from a Tennessee farmer to a Utah mining engineer to a retired Wisconsin cheese producer, were interviewed for an average of an hour each by professional interviewers, trained in survey research techniques and stationed throughout the country.

Measuring the network size

At the beginning of the interview, the respondents were asked to identify by first name or initials those individuals who comprised their personal network. In the research on social support and networks, considerable attention has been given to the differences between formal and informal social supports. Formal supports have generally been defined as support from professional organizations while informal support is considered to be support from an individual (Longino and Lipman, Note 1).

As Meyers (Note 4) has pointed out, however, supportive relationships may have both formal and informal elements. They may, for example, begin as formal relationships but become informal relationships. This study does not attempt to artificially dichotomize between the two kinds of relationships. Rather, we asked the interviewees to identify those individuals to whom they felt close by responding to three questions which were:

- (1) Beginning with the people you feel closest to, is there one person or persons that you feel so close to that it is hard to imagine life without them?
- (2) Are there people to whom you may not feel quite so close, but who are still very important to you?
- (3) Are there people whom you haven't already mentioned who are close enough and important enough in your life that they should also be placed in your network?

If the respondent answered yes to any or all of these questions, all the names or initials they gave the interviewer were entered into a diagram with four concentric circles. The innermost circle represented the respondent. The next circle contained names generated in response to question (1), and so on to the outer circle, which contained the names given in response to question (3). No limit was made on the number of people who could be entered onto the network diagram. Thus the circles give us four measures of network size-- one for each of the three circles plus one for the total network size.

Measuring feelings about the network

In addition to the questions measuring the size of the respondents' networks, we also measured their feelings about their networks. Mindful of Stueve and Lein's (Note 5) caution that "exchanges with older people can go unrecorded if one is not sensitive to variations in language and tone" (p.14), we asked questions regarding reactions to social networks in several ways. The questions are listed verbatim in Table 1.

Insert Table 1 about here

Each of the questions regarding size of the network and feelings about the network were analyzed by sex and age. The ages were divided into three strata (50-64), (65-74), and (75+) to reflect "middle-aged," "young-old," and "old-old" who are frequently distinguished in gerontological literature.

Results

The findings will be divided into two sections to reflect the two kinds of measures discussed in this paper: network size and feelings about the network.

Network size

Sex appears to have more effect on network size than does age. As evidenced by the correlations on Table 2, age and the number of people in each circle are negatively correlated. The strongest of these correlations is between age and number in the middle circle ($r = -.10$). This same table shows that sex is more strongly correlated with most of the network size variables. In particular, sex is most strongly correlated with number in the inner circle ($r = .17$) and the total number in the network ($r = .13$).

Insert Table 2 about here

In order to evaluate these differences, an age by sex multivariate analysis of variance was conducted.² Tables 3 and 6 indicate main effects for sex on the inner circle and the total circle ($p < .01$). The only significant age effect ($p < .05$) is in the middle circle (Table 4) and there are no age by sex interactions.

Insert Tables 3, 4, 5 & 6 here

To get a better sense of the way in which networks change for men and women across time, we developed summary graphs of network composition by sex and age (Figure 1). In the inner circle, women have an average of one more person than do men. Men 50 and over average three people while their female counterparts average almost four people. With age, men tend to lose people in their inner circle. The average number in men's inner circles decreases from the middle-aged ($\bar{x}=3.2$) to the old-old ($\bar{x}=2.6$) while women's inner circles change only negligibly over time.

The middle circle is similar in size for men and women but shows more change over time both incrementally and decrementally than the inner circle. Among men, the middle-aged ($\bar{x}=3.7$) to young-old ($\bar{x}=2.7$) groups lose an average of one person while the old-old group practically regains a person in this middle circle ($\bar{x}=3.4$). Women's middle circle shows a general decrement with age. The young-old women have a slightly smaller circle ($\bar{x}=3.7$) than do the middle-aged women ($\bar{x}=4.0$). The old-old women's inner circle ($\bar{x}=3.0$) shows a further decrease.

There is little change in the outer circle. For both men and women, this circle averages two people. Men's outer circles show a very slight dip from the middle-aged ($\bar{x}=2.0$) to the young-old ($\bar{x}=1.7$) but this average increases for the old-old ($\bar{x}=1.8$). For women, there is no change between the middle-aged and young-old ($\bar{x}=2.0$) while old-old women evidence a very small increase ($\bar{x}=2.1$).

The mean total network size indicates that for all age groups, women have a greater average number in each age cohort than do men. The means show that among men between middle-age ($\bar{x}=8.9$) and young-old ($\bar{x}=7.5$), a major drop

occurs. There is, however, some recovery among the old-old males ($\bar{X}=7.9$). Women's total network size decreases with each successive cohort ($\bar{X}=10.3$ vs. $\bar{X}=9.6$ vs. $\bar{X}=9.1$).

Insert Figure 1 about here

The fluctuation in network size which is occurring among men and women at different age groups is most dramatically evidenced by Figures 2 through 5. These graphs show that when dividing age into five year cohorts, there is considerable variability with sex and age on all four measures of network size: inner circle, middle circle, outer circle, and total number. Figure 2, for example, displays the mean inner circle size by age and sex. This graph, in which the respondents are divided into nine age groups, gives us a somewhat different picture than Table 3 which has only three age groups. Figure 2 shows the variability among women's inner circle throughout the age span. These changes are masked when fewer age groups are considered.

The curvilinear relationships portrayed by these graphs suggest that analyses testing for monotonic relationships cannot sufficiently capture the intertwining relationship between age and sex on measures of network size.

Insert Figures 2, 3, 4 and 5 about here

Feelings about the network

Neither age nor sex is significantly related to most of the measures regarding feelings about the network. For the few measures that evidence some significant relationship, age appears to have a stronger influence on feelings about the network than does sex. For example, the correlations on Table 2, indicate that the only correlation with at least some strength exists between age and the extent to which health restricts contact with the network ($r=.15$).

The analysis of variance lends further support to the effect of age on feelings about the network. Table 9 indicates that a significant age difference exists ($p < .05$) in relation to the respondents' desire for a larger network. Interestingly, the mean ratings on this measure indicate that the desire for larger networks decreases with age.

As with the correlations, the analysis of variance depicted in Table 10 shows that age is significantly related ($p < .01$) to health restrictions in spending time with the network. The mean ratings show that with age both men and women are more likely to report that their health restricts their contact with network members. This measure also has sex differences in the analysis of variance ($p < .05$), indicating that women at all three age levels are more likely than men to report that health restricts their network contact.

Insert Tables 7, 8, 9 and 10 about here

When these three age groups are further broken down into five year cohorts (Figures 6-9), there is evidence of greater variability and change over time. Figure 8 shows that although there is a general trend among the aged not to desire a large network, a flip-flop occurs among men between the 85-89 and 90-95 cohorts. Men in the oldest cohort suddenly evidence an increased desire to enlarge their networks.

Insert Figures 6, 7, 8 and 9 about here

Discussion

In summary, these findings indicate that women have slightly larger networks than men at all three ages - middle-age, young-old, and old-old. Men's and women's feelings about their networks are significantly different only in relation to how much their health interferes with network interactions. Significant age differences are found regarding the desirability of a larger network and the extent to which health interferes with network interactions.

Our findings show that sex differences play a greater part in network size while age differences have a larger role in feelings about one's network. Women tend to have larger networks than men, particularly within the inner circle. Age differences are more apparent, however, when we ask about the desirability of a larger network and the extent to which health affects contact with network members. With age, people tend to be less desirous of a larger network and more inclined to report that health affects their network contact.

Because we found fewer differences than expected among middle-aged, young-old and old-old groups, we decided to examine the relationship between age and the dependent measures comparing five year cohorts. This procedure revealed much more fluctuation and variability than had been evident among the three age groups. The changes in high and low points over time prompt some interesting speculation.

For example, in the inner circle a low point for women is the age cohort 65-69. This dip is paralleled by a similar decline among men in the 85-89 bracket. Conceivably this decrement in the inner circle may be attributable to the loss of a spouse. Since women generally marry men who are older than themselves (Bernard, 1972) and male's life expectancy is shorter than that of female's (Brotman, 1977), women are likely to be widowed considerably earlier than are men.

The middle circle shows even greater fluctuation over time. Some of the lowest points for men are between the ages of 60-64 and 70-74. The decrement may represent changes in relationships with co-workers brought about by the respondents' retirement or that of their peers. The change

may also reflect the death of their male friends.

These speculations can only be tested by examining the identity of the individuals, within the networks of aging adults. This information will soon be ready for analysis and will be presented in future reports on this project. However, it is clear at this point that the relationship between age and social support is not monotonic, nor are the curves identical for men and women.

It is also evident that the direction of sex differences tends to change within the oldest age groups. In several graphs we see what has been called "a flip flopping of the apex and nadir periods for men and women" (Spreitzer and Snyder, 1974, p.456). In particular, we observe that in the graphs of the inner circle, the desire for a large network, and the degree to which health restricts contact with the network there is an interaction effect between sex and age for the age cohorts 85-89 and 90-95. Whereas women typically have a larger inner circle than do men, during very old age a change occurs. Interestingly, it is also the very oldest cohort of men who want a larger network. These data must be interpreted with caution, however, because the number of cases in the oldest age groups is very small.³ However, our findings are consistent with other gerontological research (Lowenthal and Haven, 1968) which indicates that although women under 65 are more likely than men to have close relationships, women's intimate relationships decrease over time such that by the age of 75 they are more isolated than are men. Lowenthal and Haven concluded that men aged 75 and over are "psychiatrically more robust than women," in marked contrast to the younger cohort (65-74).

The oldest women's tendency to state that health does not hinder their contact with network members may reflect greater health or may be a denial of their diminishing physical capabilities. Consistent with this latter interpretation, a national study of American's mental health found an age-switch in help-seeking behavior. Women in their 90's were much less likely than their male counterparts to seek professional help. The authors concluded that "older women in America today appear to constitute the most suitable target population for those who seek to increase mental health service utilization among the elderly in our society" (Kulka and Tamir, Note 6, p.18). Indeed, then, young-old men and old-old women may be the populations in greatest need of increased social support.

In addition to such substantive issues, this paper also raises some methodological concerns. For example, the study reported here was cross-sectional. Therefore, strictly speaking, any interpretations should be confined to specific cohorts and not to change over time. To fully assess age changes a longitudinal study following the same age groups over time is necessary.

Our data also show that in discussing age effects we cannot assume that a consistent period demarcates old age. There is such variability among the age groups that different results were obtained within the age categories. These age differentials may partially account for the confusing and inconsistent findings reported in the gerontological literature on social networks.

The variability we find with sex and age poses an interesting analysis problem. In general, a linear relationship with a declining slope exists among the social network size of women as they age but men's social network reflects a U-shaped curvilinear relationship. Capturing these sex by age

interactions as well as testing for curvilinearity in the data is difficult. In thinking about this problem, it is interesting to distinguish aging as physical maturation vs. aging as passage through roles, relationships, and transitions. It may be that our measure of age confounds the physical and social psychological aspects of aging. In future research we will attempt to unravel the effects of each on individual's network of social support.

Footnotes

¹This number is diminished in some analyses due to missing data on relevant variables.

²Because the analysis of variance program used here is hierarchical, the order of entry of the independent measures is important. The first variable entered is assigned the variance it shares with subsequent independent variables. Therefore, we chose to conduct the analyses twice, reversing the order of entry of independent measures. One analysis entered sex as the first independent variable which resulted in sex obtaining both the sex effect and the predictive variance with shared age while age was residualized for sex. The other entered age as the first independent variable such that sex, in turn, was residualized for age. The results of the two analyses were not different, however. Tables 3-10 display the analysis of variance in which sex was entered as the first independent variable.

³The number of respondents in each of the women's age groups respectively is 46, 73, 60, 54, 70, 46, 36, 12, and 5. The number of male respondents in each group is 56, 53, 36, 45, 40, 27, 20, 6 and 3.

Reference Notes

1. Longino, C.F. & Lipman, A. Support network differentials between older married and nonmarried men and women. Paper presented at the Gerontological Society Meetings, Washington, D.C., November, 1979.
2. Kernodle, R.W. & Kernodle, R.L. A comparison of the social networks of blacks and whites in a sample of elderly in a southern border state. Paper presented at the Gerontological Society Meetings, Washington, D.C., November, 1979.
3. Leveton, L., Griffen, R.M. & Douglas, T.M. Social supports and well-being in urban elderly. Paper presented at the Gerontological Society Meetings, Washington, D.C., November, 1979.
4. Meyers, A. Formal and informal networks and the nature of social support in old age. Paper presented at the Gerontological Society Meetings, Washington, D.C., November, 1979.
4. Stueve, A. and Lein, L. Problems in network analysis. The case of the missing person. Paper presented at the Gerontological Society Meetings, Washington, D.C., November, 1979.
5. Kulka, R. & Tamir, L. Patterns of help-seeking and formal support. Paper presented at the Gerontological Society Meetings, Dallas, November, 1978.

References

- Bernard, J. The future of marriage. New York: World Publishing Co., 1972.
- Brotman, H. Life expectancy - comparisons of national levels in 1900 and 1974 and variations in state levels, 1969-1971. Gerontologist, 1977, 13 (1), 12-22.
- Lowenthal, M.F., & Haven, C. Interaction and adaptation: Intimacy as a critical variable. American Sociological Review, 1968, 33, 20-30.
- Myerhoff, B. Number our days. New York: E.P. Dutton, 1978.
- Pagani, A. Social isolation in destitution. In Tibbitts & Donahue (Eds.), Social and psychological aspects of aging. New York: Columbia University Press, 1962, 518-525.
- Powers, E. & Bultena, G. Sex differences in intimate friendship of old age. Journal of Marriage and the Family, 1976, 38, 739-747.
- Robertson, J.F. Women in midlife: Crises, reverberations and support networks. The Family Coordinator, 1978, 27 (4), 375-382.
- Seelbach, W.C. & Hansen, C.J. Satisfaction with family relations among the elderly. Family Relations, 1980, 29, 91-96.
- Spreitzer, E., & Snyder, E. Correlates of life satisfaction among the aged. Journal of Gerontology, 1974, 29, 454-458.
- Stephens, R.C., Blau, Z.S., Oser, G.T., Miller, M.D. Aging, social support systems, and social policy. Journal of Gerontological Social Work, 1978, 1 (1), 33-45.

Table 1

Description of Measures

Measures of Network Size

1. Number in Inner Circle: Count of those listed (range 0-16)
2. Number in Middle Circle: Count of those listed (range 0-36)
3. Number in Outer Circle: Count of those listed (range 0-23)
4. Total Number in Network: Sum of those listed in each circle (range 0-66)

Measures of Feelings about the Network

1. Change in Network Size
"Compared to five years ago, has the number of people in your network increased, decreased, or remained about the same?"
(1=decreased, 3=remained the same, 5=increased)
2. Change in Importance of Network
"Compared to five years ago, has your network become more important to you, less important or remained about the same?"
(1=less important, 3=same, 5=more important)
3. Desire Larger Network
"Now, about changing your network, would you want to have more people in it?"
(1=no, 5=yes)
4. Health Restricts Contact with Network
"Thinking about your network, does your health keep you from spending as much time with people in your network as you would like?"
(1=no, 5=yes)

Table 2
Correlations Among Variables

	Number in inner circle	Number in middle circle	Number in outer circle	Total number in network	Change in network size	Change in network importance	Desire larger network	Health restricts contact with network	Age
Number in middle circle	.1322								
Number in outer circle	.0071	.2783							
Total number in network	.5511	.7601	.6350						
Change in network size	.1051	.1245	.0780	.1695					
Change in network importance	.1334	.1484	.1516	.2175	.1410				
Desire larger network	.1443	.0890	.0714	.1601	.0381	.1848			
Health restricts contact with network	.0523	-.0229	.0123	.0204	-.0746	.0854	.0640		
Age	-.0523	-.1025	-.0061	-.0628	-.0289	-.0619	-.1092	.1467	
Sex	.1723	.0582	.0370	.1304	-.0270	.0586	.0234	.0911	.0995

Table 3

Mean Number in Inner Circle by Age and Sex

Cell Frequencies and Two-way Analysis of Variance Results

	Age		
	50-64	65-74	75+
Male	3.21 (145)	3.03 (85)	2.64 (56)
Female	3.99 (179)	3.53 (124)	3.97 (99)

F-ratio
 Sex 20.885*
 Age .191
 Sex x Age .542

*p<.01
 +p<.05

Table 4

Mean Number in Middle Circle by Age and Sex

Cell Frequencies and Two-way Analysis of Variance Results

	Age		
	50-64	65-74	75+
Male	3.71 (145)	2.72 (85)	3.41 (56)
Female	4.03 (179)	3.74 (124)	2.98 (99)

F-ratio
 Sex 2.319
 Age 3.716+
 Sex x Age 2.233

*p<.01
 +p<.05

Table 5

Mean Number in Outer Circle by Age and Sex

Cell Frequencies and Two-way Analysis of Variance Results

	Age		
	50-64	65-74	75+
Male	2.02 (145)	1.74 (85)	1.84 (56)
Female	2.01 (179)	1.90 (124)	2.14 (99)

F-ratio
 Sex .412
 Age .208
 Sex x Age .227

*p<.01
 +p<.05

Table 6

Mean Number in Total Circle by Age and Sex

Cell Frequencies and Two-way Analysis of Variance Results

	Age		
	50-64	65-74	75+
Male	8.94 (145)	7.49 (85)	7.89 (56)
Female	10.34 (179)	9.64 (124)	9.09 (99)

F-ratio
 Sex 11.485*
 Age 1.978
 Sex x Age .621

*p<.01
 +p<.05

Table 7

Mean Rating of Change in Network Size by Age and Sex
Cell Frequencies and Two-way Analysis of Variance Results

	Age		
	50-64	65-74	75+
Male	3.01 (145)	2.91 (85)	2.93 (56)
Female	2.93 (179)	3.00 (124)	2.74 (99)

F-ratio
Sex .336
Age 1.170
Sex x Age .699

*p<.01
+p<.05

Table 8

Mean Rating of Change in Network Importance by Age and Sex
Cell Frequencies and Two-way Analysis of Variance Results

	Age		
	50-64	65-74	75+
Male	3.79 (145)	3.78 (85)	3.75 (56)
Female	4.01 (179)	3.84 (124)	3.79 (99)

F-ratio
Sex 2.350
Age .898
Sex x Age .471

*p<.01
+p<.05

Table 9

Mean Rating of Desiring a Larger Network by Age and Sex
Cell Frequencies and Two-way Analysis of Variance Results

	Age		
	50-64	65-74	75+
Male	2.41 (145)	2.27 (85)	1.79 (56)
Female	2.59 (179)	2.19 (124)	2.13 (99)

F-ratio
Sex .899
Age 4.033+
Sex x Age .573

*p<.01
+p<.05

Table 10

Mean Rating of Health Restricting Contact with Network by Age and Sex
Cell Frequencies and Two-way Analysis of Variance Results

	Age		
	50-64	65-74	75+
Male	1.25 (145)	1.57 (85)	1.79 (56)
Female	1.54 (179)	1.74 (124)	1.97 (99)

F-ratio
Sex 4.476+
Age 6.819*
Sex x Age .121

*p<.01
+p<.05

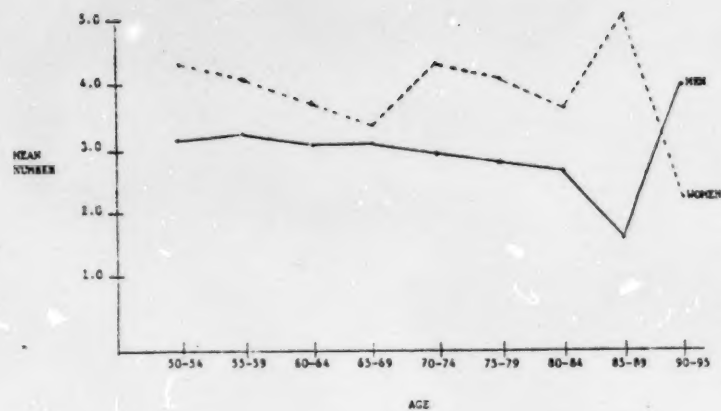


Figure 2. Mean number in inner circle by age and sex.

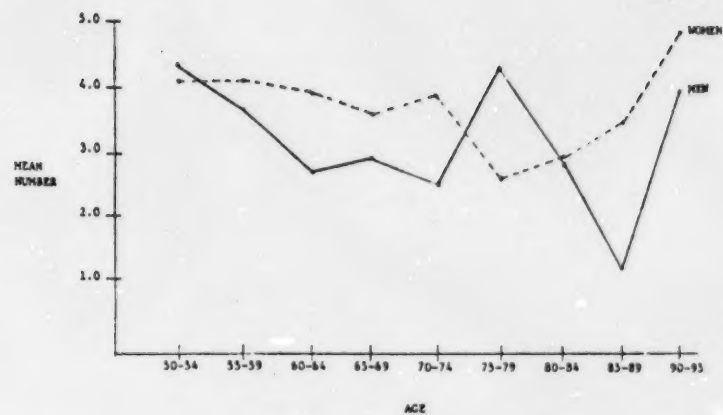


Figure 3. Mean number in middle circle by age and sex.

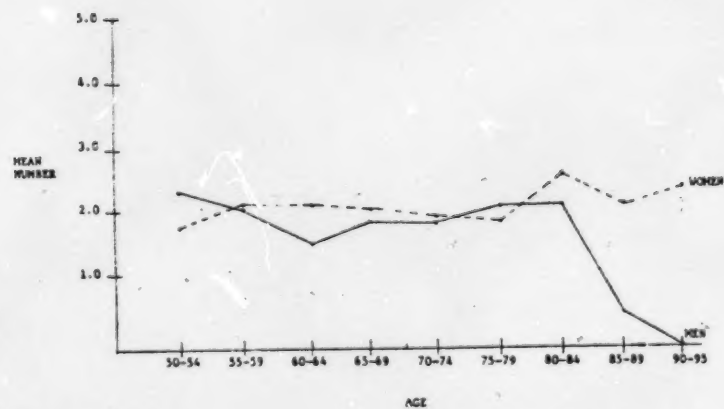


Figure 4. Mean number in outer circle by age and sex.

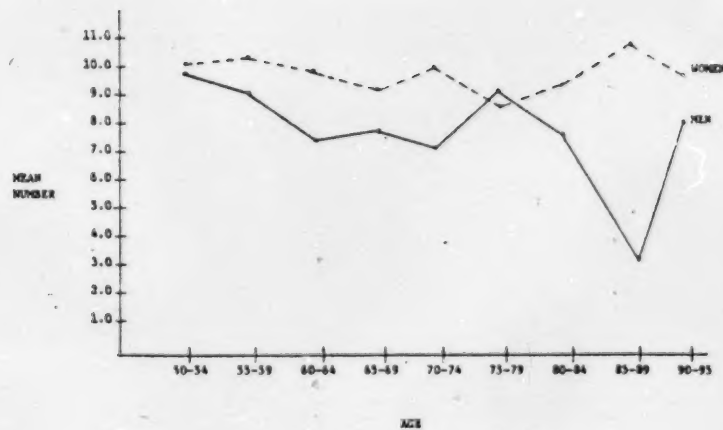
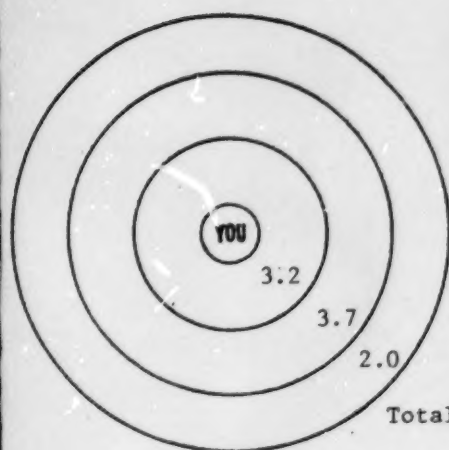
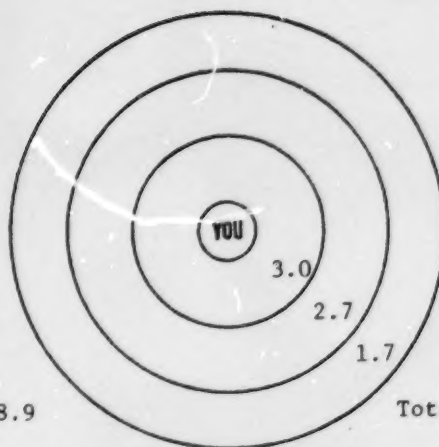


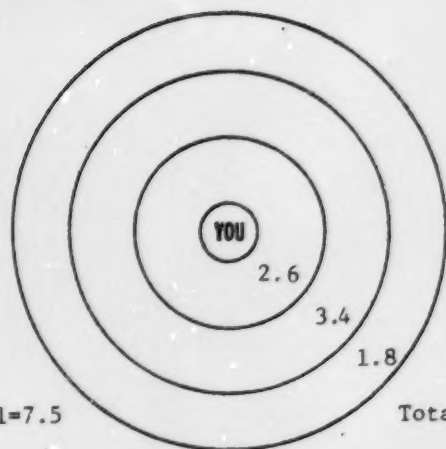
Figure 5. Mean number in total circle by age and sex.



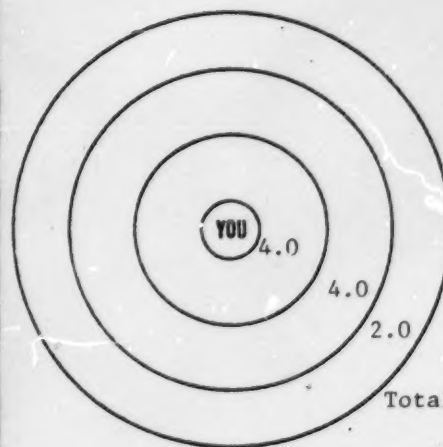
Males 50-64



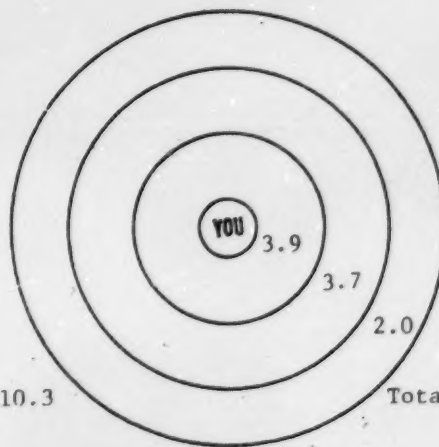
Males 65-74



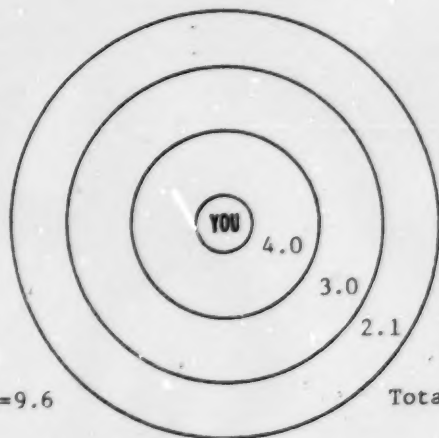
Males 75+



Females 50-64



Females 65-74



Females 75+

Figure 1. Mean network size by age and sex.

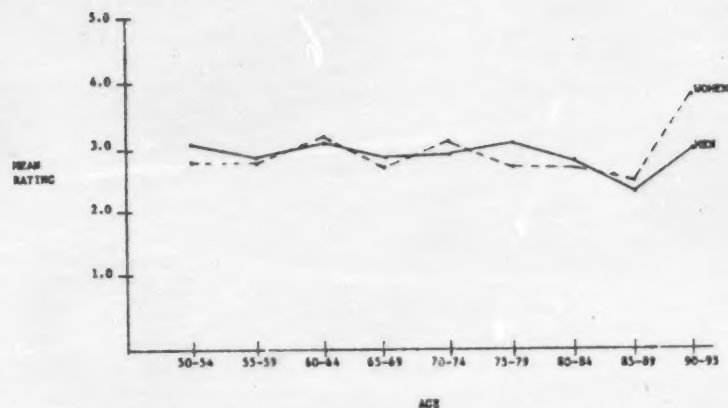


Figure 6. Mean rating of change in network size by age and sex.

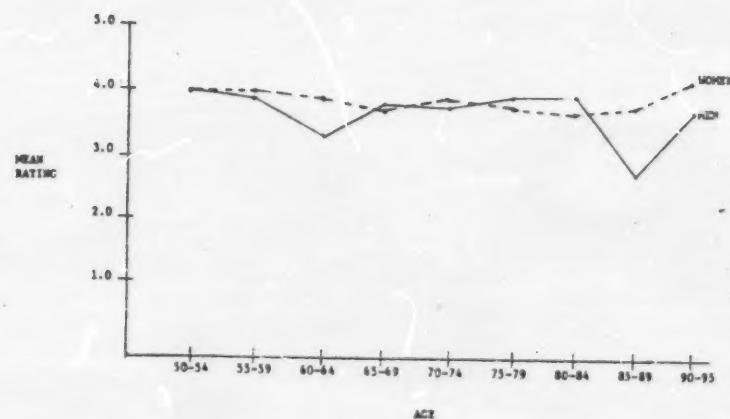


Figure 7. Mean rating of change in network importance by age and sex.

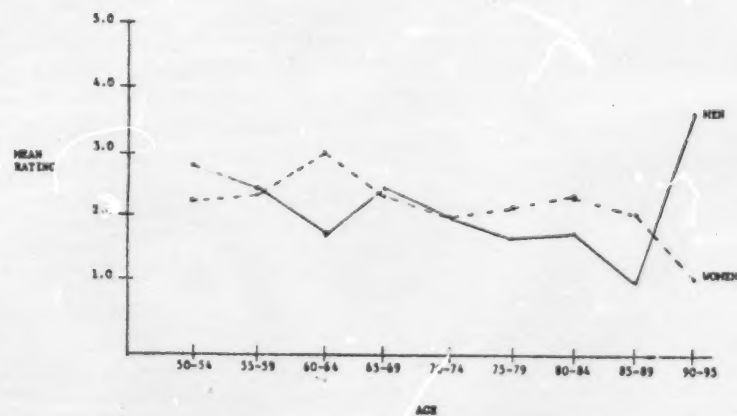


Figure 8. Mean rating of desiring a larger network by age and sex.

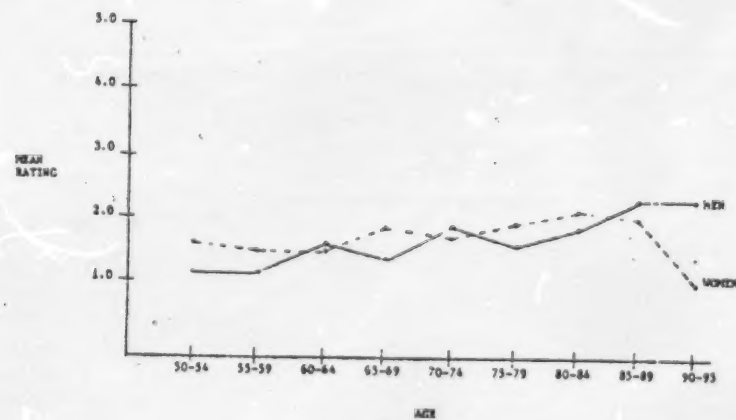


Figure 9. Mean rating of health restricting contact with network by age and sex.

Social Networks of Middle-Aged and Older Adults

Berit Ingersoll
Charlene Depner

Table 1

Description of Measures

Measures of Network Size

1. Number in Inner Circle: Count of those listed (range 0-16)
2. Number in Middle Circle: Count of those listed (range 0-36)
3. Number in Outer Circle: Count of those listed (range 0-23)
4. Total Number in Network: Sum of those listed in each circle (range 0-66)

Measures of Feelings about the Network

1. Change in Network Size
"Compared to five years ago, has the number of people in your network increased, decreased, or remained about the same?"
(1=decreased, 3=remained the same, 5=increased)
2. Change in Importance of Network
"Compared to five years ago, has your network become more important to you, less important or remained about the same?"
(1=less important, 3=same, 5=more important)
3. Desire Larger Network
"Now, about changing your network, would you want to have more people in it?"
(1=no, 5=yes)
4. Health Restricts Contact with Network
"Thinking about your network, does your health keep you from spending as much time with people in your network as you would like?"
(1=no, 5=yes)